

Maintenance modernization critical for 1-1 Cavalry in Buedingen

Story and Photos by Torrie McAllister
Europe District Public Affairs

Winter maintenance holds special perils for many of USAREUR's soldiers who still maintain their sophisticated, multimillion dollar equipment in tents, World War I vintage horse stables, and World War II vintage hangars.

But not for the 1-1 Cavalry in Buedingen this year.

For the first time, avionics mechanics are repairing their helicopters out of the cold, damp weather in a newly renovated hangar.

The \$1.36 million facility upgrade included the hangar, runway repairs and security lighting.

Mechanics say that new electronic lift equipment, POL separators and adequate heat and lighting help them minimize downtime for the 1-1 CAV's 16 new OH58D Kiowa Warrior helicopters. The Warrior, with its sensitive mast-mounted thermal imaging system, identifies targets for the Hellfire.

For years the 1-1 CAV aviation troops have maintained choppers in a clam shell tent because the Buedingen airfield hangar was condemned.

"For anyone who has ever had to pull maintenance in a clam shell, the change is dramatic—especially in winter," said Sgt. Mark Shirley.

"Snow and ice collect on a clam shell's roof," he continued. "You turn on Herman Nelson hot air blowers so you can work and everything starts to melt. Water drips in through tiny cracks and holes. Everything freezes overnight. The next morning the tent floor is a skating rink and crews start their day out unthawing things. Once moisture gets into the equipment there's lots of downtime while things dry out and we make sure everything is safe and operational."

"Just having good overhead lighting improves operational effectiveness. We're used to working 16 hours a day and winter days are short in Germany," said Shirley.

The need to keep moisture at bay was decisive in funding the hangar renovation. When the 1-1 CAV learned they would be getting high-tech Warrior helicopters they knew they had to protect the high performance electronics. The new \$1.2 million thermal imaging system had to be maintained in a dry environment. In stormy weather, the Warrior is best protected when stored inside.

The newly renovated hangar is capable of housing all 16 aircraft if necessary while maintenance and aircraft washes go on.

The renovation included the installation of electronic heavy lifting equipment, making it easier to safely pull rotors, special optics and engines.

A new POL separator, and sewer and drain system help mechanics keep hydraulic fluid and other contaminants out of the soil and ground water.



Electronic lift equipment improves maintenance capability for Avionics mechanic Pfc Alfredo Espedes.

The 104th Area Support Group and the Corps of Engineers had just eleven months to modernize the old hangar when they learned the new equipment was on the way. "It was in terrible condition," 104th ASG EP&S Chief Sean MacDonald said. "The utility systems had failed. The roof leaked. The bay doors had holes and there was no arms room."

"People from HQDA looked at it and said we couldn't fix it in time for the 1st Armored Division to field the new helicopters," he said. "Without the hangar they couldn't get the equipment."

"Europe District agreed to work with us to complete the project while the aviation troops were training on the new equipment at Fort Hood for eleven months," he said. "The unit was very helpful in identifying their requirements up front and not making changes."

After that, it was engineer teamwork that kept the project

on schedule. Europe District Project Manager Dana Luedtke and Project Engineers George Van Cook and Peter Emmel collaborated closely with McDonald and the 104th ASG EP&S Engineers and Staatsbauamt Friedberg to ensure the hangar was completed on time.



Pfc Alfredo Cespedes and Spec. Weston Irwin test a Kiowa Warrior's thermal imaging system during maintenance. The 1-1 Cavalry's \$1.36 million facility upgrade included repairs to the hangar, runway and the addition of security lighting.



For years, the 1-1 Cavalry aviation troops maintained helicopters in a clam shell tent outdoors.